



# The Lake Erie Regional Grape Program



## *Crop Update for August 1, 2014*



### **Upcoming Event Dates to put on your calendar:**

*Please note the deadline for registration for each event.*

**August 20, 2014- Thompson Ag Pig Roast**  
3:00-5:00pm, Hanover NY



Information and registration forms for all of the listed events are available in this update.  
Registration is also available on-line for most programs at our web-site: [lergp.cce.cornell.edu](http://lergp.cce.cornell.edu)

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*Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.*

# Business Management

Kevin Martin  
Penn State University, LERGP,  
Business Management Educator



Kevin will be back next week.

# Cultural Practices

Luke Haggerty, LERGP,  
Viticulture Extension Associate

## Do you have Crown Gall in 'Niagara'?

Luke Haggerty

*Viticulture Extension Associate*

*Lake Erie Regional Grape Program*

During site visits this past week I've seen signs and symptoms of new crown gall infections. Crown gall has been a long widespread disease in grapes. In the Lake Erie region, crown gall is commonly found on wine grape cultivars and 'Niagara'. New gall formations are normally found in early summer and will remain on the trunk until it is cut out. Depending on the severity of

infection and when you observe the damage, there are a few specific indicators to watch for. New infections will

produce a milky/tan to a yellow/green colored substance on the infected area (Figure 1). Newly formed tumors appear as light green/yellow to brown gall and look like the inside of a walnut (Figure 2). Any wound site on a vine is prone to crown gall. Trunk cracking and splitting (trunk

injury) from winter injury is the most common cause of infections. This disease will reduce vigor, yield, and overall health of the vine and will eventually completely kill the vine.

I will be conducting crown gall assessments through early September and I'm looking for vineyards to check. If you are interested in setting up a site visit call me at (716) 792-2800 Ext. 204 or email me at [llh85@cornell.edu](mailto:llh85@cornell.edu).



Figure 1 Newly formed crown gall on 'Niagara' trunk.



Figure 2 Early stage of crown gall tumors on 'Niagara'.

# Weather Data

## Lake Erie Grape Region NEWA Weather Data

Location	Date	High (F)	Low (F)	Precip.Past 7 days (in)	Precip. Jul.Total
North East Lab, PA	7/30/14	71	56	2.68	5.60
Harborcreek, PA	7/30/14	70	57	2.1	4.66
North East Escarpment	7/30/14	69	57	3.2	6.22
Ripley	7/30/14	70	58	1.49	3.84
Portland Route 5	7/30/14	71	58	1.43	3.87
Portland CLEREL	7/30/14	69	59	2.09	4.28
Protland Escarpment	7/30/14	68	56	1.67	4.70
Dunkirk	7/30/14	71	58	1.88	4.87
Silver Creek	7/30/14	71	59	2.19	5.63
Sheridan	7/30/14	72	58	NA	NA
Versailles	7/30/14	70	56	NA	NA
Appleton	7/30/14	68	57	2.78	6.37
Somerset	7/30/14	67	57	2.62	6.35
Appleton South	7/30/14	67	56	2.18	5.40

Note: All Weather data reported as of 7/30/2014. NA=Sensor Malfunction

[illegible]



## Recent Hail Events

We have been getting reports that the storm fronts that we have seen recently contained hail that produced damage in many vineyards across the Lake Erie grape belt. While there is nothing that can be done to cure hail damage, it would be a good idea to take the time to get out into your vineyard blocks and assess whether or not your various blocks have been hit, and if so, the level of damage that occurred. If you feel the level of damage in a block is significant, you should document the damage and contact your crop insurance agent.

It has not been shown that any material is effective in protecting, or preventing further damage, to the berry from rots associated with the hail providing entry wounds to the interior of the berry. If there is any good news, it is that, at this point in the season, the sugar content of the berries should be low enough where rots should not be a major concern. Many wounds may just callous over if weather conditions cooperate.

## Grape Berry Moth Model on NEWA

According to the output of the GBM model on NEWA for stations in the Lake Erie region, we have not moved significantly toward the time where scouting should be taking place (1470 -1610 DD) to determine the need to make an application for the third generation. At an average daily accumulation of 23 DD, the model is reporting that it will be approximately 8 days before the start of the scouting period (1470 DD) in Harborcreek and Ripley, and up to 17 days for vineyards in Niagara County.

At the July 30 Coffee Pot meeting we had a good discussion on the grape berry moth model and the timing of insecticide applications for the third generation. Growers reported that when they examined the interior of damaged berries they were finding various sizes for GBM larvae from small to large and questioned how this would affect the timing of the upcoming sprays. This variety of sizes is a great indicator of how the generations start to spread out as the season progresses and, eventually, may start to overlap as we get later in the season, especially those years where we have an extra generation.

NEWA Location	Wild grape bloom date*	DD Total on July 24, 2014
Versailles	June 5	1159
Dunkirk Airport	June 8	1167
Silver Creek	June 9	1148
Portland Escarp.	June 4	1206
Portland	June 7	1188
Portland Route 5	June 7	1222
Ripley	June 3	1274
North East Escarp	June 3	1221
Harborcreek	June 3	1276
North East Lab	June 5	1220
Ransomville	June 9	1092
South Appleton	June 9	1079

\* Estimated date provided by NEWA website

It is important to keep in mind that the 810 DD that is used to time insecticide applications is actually the number of degree days (base 47.17°F) it takes for the grape berry moth to complete their life cycle. In other words, starting with a newly laid egg, it takes 810 DD for that egg to hatch, go through the various larval stages, pupate, become an adult, mate and have another egg laid. This is one generation. The moth that laid the initial egg in the example has since died (after laying between 20 – 40 eggs) and a new generation of moths is now laying eggs.

Grape berry moth overwinters as pupae so in the spring, adults emerge from the pupae, mate and start laying eggs. Since the life cycle of the grape berry moth is driven by heat accumulation (the warmer it is

the faster they go through their life cycle) it is easy to understand why emergence of adults from the overwintering pupae is spread out. Those pupae that are closest to the wooded edge, or even on the vineyard floor, will warm up quicker in the spring and have adult emergence earlier than the rest. These adults, therefore, will be able to start egg-laying earlier than the rest of the overwintering population resulting in egg-laying of the overwintering population to be spread out over many days. Knowing this, it is easy to see that as the growing season progresses, the time of egg-laying will become more spread out as populations get larger and the variability in time of mating and egg-laying increases.

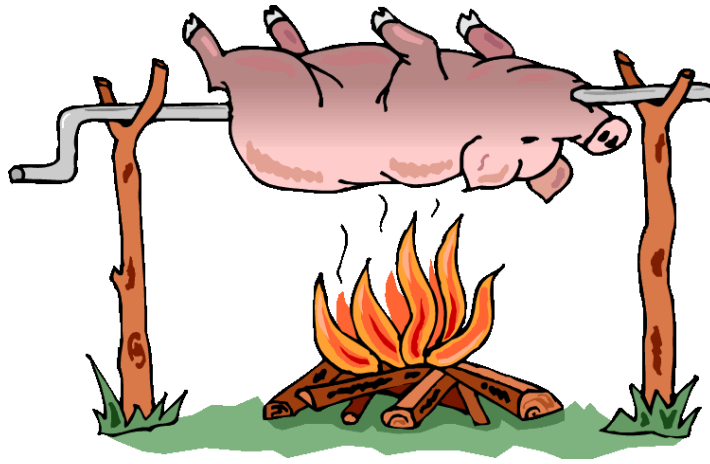
The model attempts to take this variability into account and provides us with an average timing for scouting and application of insecticides for grape berry moth. As has been discussed in previous weeks' Crop Updates, if you have major problems with grape berry moth you should assess how you are approaching the problem, and make changes when necessary. If you have questions on how to implement the new phenology-based DD model for grape berry moth, or would like to go over your grape berry moth management strategy, please give me a call at 716.792.2800 x203 or email me at [thw4@cornell.edu](mailto:thw4@cornell.edu).

Weather: We have racked up 5.54" rainfall from July 1 through the 30th. Rainfall in 2014 is currently about 5" above our seasonal 20 year average for April 1 to end of July. Our growing degree day total (gdd) from April 1 through July 30 is 1418, which is below average. Our gdd total for July is 553, also below average.



Disease: As you know, most of the diseases we spray for every year are caused by parasitic fungi (black rot, Phomopsis, powdery mildew) or fungus-like microorganisms (downy mildew), and the completion of their life cycles are intimately dependent on rainfall. Therefore, a good rule to remember is this: as rainfall amounts and frequency increase, your scouting efforts should also increase. I know this is getting tiresome to hear, but scout, scout, scout!!, especially for diseases like downy mildew on leaves of susceptible varieties. Yes, unfortunately, if you are growing varieties like Niagara or Catawba, or susceptible wine varieties, I wouldn't put the sprayer away yet. Continue to scout your vineyards, especially your most disease prone blocks, for signs and symptoms of downy mildew. I am seeing symptoms of downy on leaves of suckers of Niagara and Chardonnay here at the lab, and it is increasing with the potential to get out of control if rainfall continues. And with nearly 9 inches of rain in June/July, it's not surprising. And also remember: more downy mildew in your vineyard this year, leaves more inoculum over-wintering in your vineyard, which means greater potential for problems controlling this disease next year should weather be wet.

The last of the black rot fruit rot is now showing up on larger berries even though we are probably past the end of the susceptibility period, even for wine varieties. These fruit infections occurred weeks ago and slipped through our fungicide sprays during the second week in July and are just now being expressed. If you're seeing these symptoms in your vineyard, this information can be used to determine where shortcomings in your post bloom spray program occurred.



# Thompson Ag Annual Pig Roast

August 20, 2014  
3:00-5:00pm  
Hanover NY

Program provided by:  
**The Lake Erie Regional Grape Program**

\*\*DEC credits are available



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• **Agenda:**

- 3:00 – 3:15 PM **Cost/Benefit of Implementing Integrated Pest Management Strategies (IPM)**, Kevin Martin, Extension Educator, Lake Erie Regional Grape Program.
  - 3:15 – 3:30 PM **Late Season Viticulture Update** – Luke Haggerty, Lake Erie Regional Grape Program
  - 3:30 – 4:00 PM **Late Season Disease Management** – Wayne Wilcox, Department of Plant Pathology, Cornell University
  - 4:00 – 4:30 PM **IPM Updates and Roundtable Discussion** –Bryan Hed, Department of Plant Pathology, Penn State, Jody Timer, Department of Entomology, Penn State, Tim Weigle, NYS IPM Program, and Andy Muza, Lake Erie Regional Grape Program
  - 4:30 – 5:00 PM **Effective Spraying** - Andrew Landers, Department of Entomology, Cornell University will provide the audience with the how's and why's of effective spraying from the basics through the finer details.
- .....

Please RSVP to Donna at [merrwhv@roadrunner.com](mailto:merrwhv@roadrunner.com) or call 984-3808(Thompson Ag Office)



# 2014 Lake Erie Regional Grape Program Enrollment

**\*\*This form is for NY Growers ONLY- PA Growers call 814-825-0900 to register**

## **Fees:**

\$70.00 \$\_\_\_\_\_ **GRAPE Program** -Chautauqua county landowner  
(*\$45.00 program fee, \$25.00 Chautauqua County Base Fee*)

\$65.00 \$\_\_\_\_\_ **GRAPE Program**- Cattaraugus, Erie, NY or Niagara  
(*\$45.00 program fee, \$20.00 County base fee*)

\$100.00 \$\_\_\_\_\_ **GRAPE Program** -Out of Program Region Resident

\$25.00 \$\_\_\_\_\_ 2014 Cornell Guidelines for Grapes

\$25.00 \$\_\_\_\_\_ Hardcopy mailing of Newsletters\*\*\*

Total \$\_\_\_\_\_ (Please make check payable to LERGP)

Program fees do  
not include 2014  
Cornell Guidelines for  
Grapes

I am interested in the educational work of Cornell Cooperative Extension in Niagara, Chautauqua and Cattaraugus County. Any current re-  
corded enrollee 18 years of age and older shall have voting and nominating privileges to hold office in the Association of their local county.

☐ I am 18 years of age or older and signed\_\_\_\_\_

☐ New ☐ Renewal

Farm Name:\_\_\_\_\_

Name:\_\_\_\_\_ Spouse's Name: \_\_\_\_\_

Address:\_\_\_\_\_ City:\_\_\_\_\_

State:\_\_\_\_\_ Zip Code\_\_\_\_\_

Home phone:\_\_\_\_\_ Cell Phone :\_\_\_\_\_

\*\*\*Due to budget constraints, all correspondence will be conducted through e-mail. Please provide your  
e-mail address below. If you would like to receive hardcopies, mark the \$25.00 additional fee line above  
and include with payment.\*\*\*

EMAIL ADDRESS\_\_\_\_\_

Please return form and payment to:

Feel free to call w/ questions:

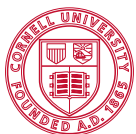
LERGP

716-792-2800 Ext 201

6592 West Main Rd.

Portland NY 14769

Attn: Katie



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## LERGP Website Links of Interest:

Table for: Insecticides for use in NY and PA:

<http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm>

Crop Estimation and Thinning Table:

[http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65\\_pdf.pdf](http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf)

Appellation Cornell Newsletter Index:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/>

Veraison to Harvest newsletters:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm>

Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events.

Please remember to RSVP for those events that require one!



**Lake Erie Regional Grape Program Team Members:**

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Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.

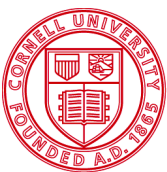
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